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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/406,445	09/27/1999	FREDERICK H. BARKER	OT-4551	1618

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OTIS ELEVATOR COMPANY
INTELLECTUAL PROPERTY DEPARTMENT
10 FARM SPRINGS
FARMINGTON, CT 06032

EXAMINER

TRAN, THUY VAN

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 12/03/2003

18

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 18

Application Number: 09/406,445
Filing Date: September 27, 1999
Appellant(s): BARKER ET AL.

Sean W. O'Brien
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed March 17, 2003.

(1) Real Party in Interest

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Otis Elevator Company.

(2) *Related Appeals and Interferences*

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

No amendment after final has been filed.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

The rejection of claims 15-21 and 23-24, and 25-31 and 33-34 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

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(9) Prior Art of Record

DE 2,054,936 A	Damjan Hladnik	5-1971
GB 2,190,356 A	Winkler et al.	11-1987
US 5,531,295	Kopman et al.	7-1996
US 5,065,845	Pearson	11-1991

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 25-31, 33 and 34 are rejected under 35 U.S.C. 112, first paragraph. This rejection is set forth in prior Office Action, Paper No. 13.

Claims 15029, 23, 25-30 and 33 are rejected under 35 U.S.C. 103 (a) as being unpatentable over DE 2,054,936 (DE '936) in view of GB 2,190,356 (GB '356). This rejection is set forth in prior Office Action, Paper No. 13.

Claims 21 and 31 are rejected under 35 U.S.C. 103 (a) as being unpatentable over DE '639 in view of GB '356 as applied to claims 15 and 25 respectively above, and further in view of Kopman et al. 5,531,295. This rejection is set forth in prior Office Action, Paper No. 13.

Claims 24 and 34 are rejected under 35 U.S.C. 103 (a) as being unpatentable over DE '639 in view of GB '356 as applied to claims 15 and 25, respectively above, and further in view of Pearson 5,065,845. This rejection is set forth in prior Office Action, Paper No. 13.

(11) Response to Argument

Appellants argue that the value of specified relative coefficient of friction of approximately 1.0 pertains to any frangible, non-metallic guide rail, not necessarily concrete, and the pressure level (50 psi) is not specified in the rejected claim 25, and further, since the specification does not explicitly describe friction surface materials having the specified coefficient relative to any other non-metallic guide rail material besides concrete, does not preclude claiming a friction surface material having the specified coefficient relative to a non-metallic guide rail.

The maximum pressure of 50 psi is desirable to avoid damaging to the concrete guide rail (specification page 4, line 18- page 5, line 2), and the selection of friction surface such as vulcanized rubber (or other material) similar to an automobile tire will provide a relative coefficient of friction of about 1.0 in order to allowing a lower pressure to be used against concrete rail (specification page 5, lines 9-14). All the numbers were derived from the maximum safety pressure a concrete guide rail may sustain which is 50 psi. Thus, it is almost impossible to determine whether one would infringe the claim invention if a concrete guide rail in combination with a friction surface were omitted from the claim.

Appellants argue that ribs 5 of DE '936 are not guide rails. Page 4 of the English language translation clearly indicates that "ribs 5 with several guide surfaces are made on side walls 1.The rib-like guides 8 are made parallel to the ribs 5 on the side walls; these guides give counterweight a guide track or an emergency guide."

In response to Appellants' argument that there is no suggestion in the art to use safeties that would engage the ribs 5, since the ribs 5 are guide rails one ordinary skill in the

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elevator art would have known that guide rails are also used for safety brake and any elevator system would be required to have a safety system.

Appellants argue that the tapered surfaces of ribs 5 would have required a modification to the safeties of GB '356. It is noted that the examiner just relies on the teaching the use of an adjustable brake.

Appellants argue that it is not understood how a specified pressure would have been obvious to derive from a formula reciting friction force as a function spring force, coefficient of friction and wedge angle. The reference shows the formula of friction force as a function of spring force, and it is known that pressure is force over contact area ($P = F/A$), thus the pressure can be determined using the formula of friction force over the engaged surface.

In response to Appellants' repeated arguments with respect to the ribs 5 of DE '936, the combination of utilizing the safety to engage the ribs 5, see examiner's previously responded.

Appellants argue that the asserted combination fails to disclose or suggest friction surface is formed of a material that has a coefficient of friction of approximately 1.0 to the non-metallic guide rail. Again, a selection of friction surface that has a coefficient of friction of approximately 1.0 to the non-metallic (concrete) guide rail would have been obvious to one having ordinary skill in the art in order to provide a sufficient braking force to an elevator system without destroy the guide rails.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

TVT
November 28, 2003

EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
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